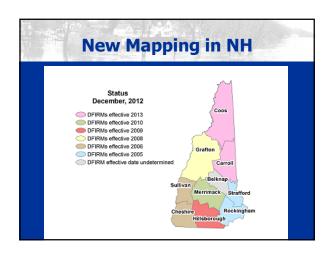


## What is NFIP? • Voluntary and mutual agreement between the Federal Emergency Management Agency (FEMA) and a community

- Participating Communities agree to adopt and administer appropriate regulations
- FEMA will make available flood insurance for all residents

## **National Flood Insurance Program Floodplain** Floodplain Flood Regulations Insurance Maps Determines Details what Determined by whether in or out. regulations must how the If in, determines be met for the structure is development built, what flood the flood zone based on its zone it is and BFE/depth flood map located in, etc. and lender location. required flood insurance.

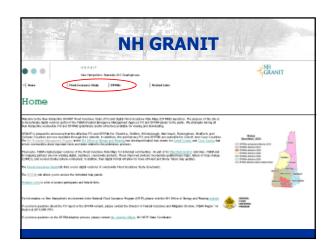


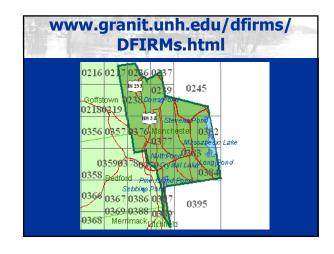


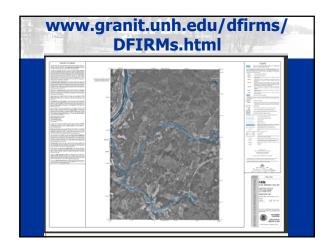
## **Where to Find Floodplain Maps**

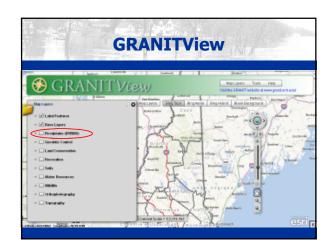
- FEMA Map Store (www.msc.fema.gov) for viewing, printing a FIRMette, and purchase of digital data only
- NH GRANIT (www.granit.unh.edu/dfirms) for DFIRMs: on-line viewing of pdf copies maps and studies, free download of GIS data, and purchase of paper copies
- GRANITView (http://granitview.unh.edu) for interactive mapping of floodplain data







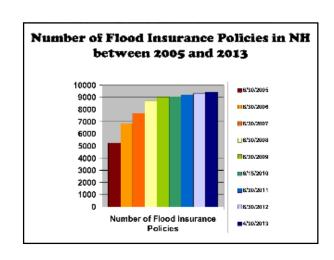


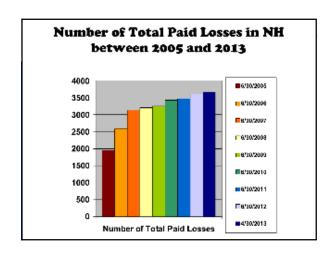




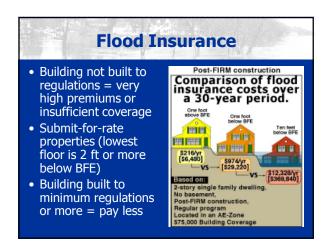


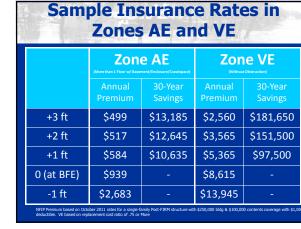
# NH Flood Insurance Stats • Number of Policies: 9,436 - Outside SFHA - 3,389 (36%) • Total Insurance Coverage \$1.9 billion • Total Paid Losses\*: 3,667 • Total Amount Paid\*: \$48 million \*Since 1978

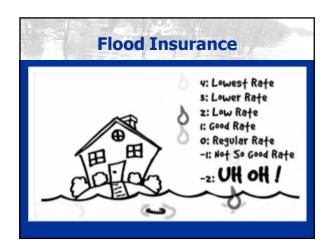




## **Community Policy Data** # of Paid # of Paid # of # of **Policies Policies** Losses in Losses in SFHA outside **SFHA** outside **SFHA SFHA Nottingham** 12 15 10 **Plymouth** Rochester 20 61

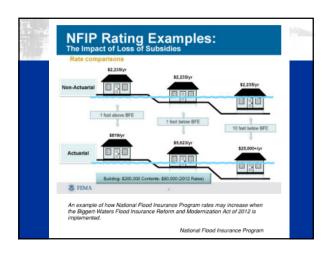


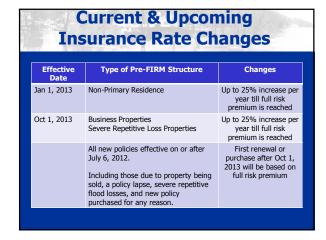


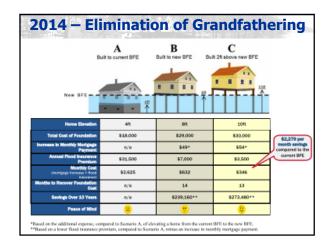


## Flood Insurance Reform Act of 2012

- Passed by Congress on July 6, 2012
- Intent is to eliminate subsidies for:
  - Structures built prior to the first flood insurance map in a community (pre-FIRM)
  - Policies based on the map in effect when structure was built (grandfathering)







## NFIP Minimum Regulations Better than Nothing...but... • Buildings can still suffer damage • Do not address changes to floodplain areas that are not updated on FEMA's maps • Do not address future conditions

## ASFPM strongly believes the minimum NFIP floodplain regulations: • do not provide adequate long-term flood risk reduction for communities; and

• the benefits of flood risk reduction achieved by higher regulatory standards far outweighs the burden of administering them.

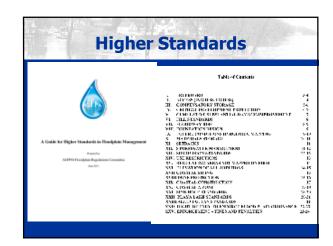
ASFPM - A Guide for Higher Standards in Floodplain Management - 2011

## Revised State Model Floodplain Ordinances

- Coming soon!
- Revising regulations to give everyone a better understanding
- Zone A with no BFE
  - No basements!
  - Lowest floor elevated at least 2 ft above Highest Adjacent Grade

## Sample Insurance Rates in Zone A Areas with no BFE

Elevation Difference	Zone A (Without Basement/Endosure/Crawlepace)	
(Lowest Floor above HAG)	Annual Premium	30-Year Savings
+5 ft	\$628	\$73,950
+2 to 4 ft	\$1,308	\$53,550
+1 ft	\$3,093	
0 (at HAG)	Submit for Special Rating	



## **Freeboard**

- New construction or substantial improvement of any residential structure shall have lowest floor, including basement elevated (1', 2', 3', etc.) above the base flood elevation.
- Where a base flood elevation is not known (Zone A), the lowest floor shall be elevated at least 2' above the highest adjacent grade.



## **Freeboard Examples**

Community	Freeboard Elevation Above BFE
Allenstown	2 ft
Canaan	2 ft
Concord	2 ft (Merrimack River)
	1 ft remainder of City
Keene	1 ft
Raymond	1.5 ft (New Construction)
	1.5 ft (Recommended for Substantial Improvements
Salem	1 ft
Winchester	1 ft

## **Preservation of Floodplain Areas**

- A community can restrict all development from the floodway or the entire floodplain area or restrict only certain types of development such as critical facilities and residential structures.
- Language needs to be carefully worded to avoid taking challenge or other issues.

## **Preservation of Floodplain Areas**

Community		Prohibited in Floodplain	
Bath Conway Walpole			All development
Allenstown Concord Cornish Derry Easton Epsom Francestown	Franconia Grantham Hampton Hancock Hanover Keene Lisbon	Litchfield Madbury Piermont Salem Sanbornton Swanzey Walpole	Certain uses and/or new or substantially improved buildings, fill, etc.

## **Setbacks**

- Proposed developments adjacent to riverine floodplains shall be setback (50', 100', 200', etc.) from floodway boundary or centerline of stream (with no floodway).
- Proposed development adjacent to coastal floodplains (Zone VE) shall be set back (100', 200', 300', etc.) from the mean low tide boundary.

## **Setback Examples**

- Grantham has lot, frontage, setback and height requirements in their floodplain conservation overlay district.
- Piermont requires that all parts of any structure, residential, non-residential, commercial, industrial, or agricultural, including mobile homes, must be set back at least 75 feet from the 100-year floodplain boundary.

## **Cumulative Substantial Damage**

Flood related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.



## Cumulative Substantial Improvement

When the combined total of all improvements or repairs made after the adoption of this regulation equals or exceeds 50 percent of a structure's market value, that structure is considered to be substantially improved.



# Compensatory Storage FLOODWAY SCHEMATIC 100 YEAR FLOODPLAIN 100 YEAR

## **Compensatory Storage**

Fill within the special flood hazard area shall result in no net loss of natural floodplain storage. The volume of the loss of floodwater storage due to filling in the special flood hazard area shall be offset by providing an equal volume of flood storage by excavation or other compensatory measures at or adjacent to the development site.

## **Compensatory Storage Examples**

Community	Excavation/Fill Ratio
Keene	1:1
Raymond	1:1
Salem	2:1

## **Critical Facilities**

 Prohibit critical facilities and developments in all special flood hazard areas (and in all 500-year floodplains).



 Those adjacent to special flood hazard areas shall be 2 ft above the 500-yr flood elevation. Access roads to and from facility should be elevated at this level.

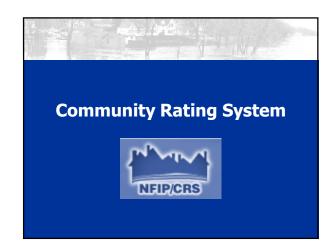


## **Access (Ingress-Egress)**



## **Access (Ingress-Egress)**

New development proposals will be designed, to the maximum extent practicable, so residential building sites, walkways, driveways, and roadways are located on land with a natural grade with elevation not less than the base flood elevation and with evacuation routes leading directly out of the floodplain area (dryland access).



## **Community Rating System**

- A FEMA voluntary incentive program for NFIP communities
- Reward communities that are doing more than meeting the NFIP requirements by reducing the flood insurance premiums of their residents by a certain percentage.

<b>Credit Points</b>	CRS Class	Discount
4,500 +	1	45%
4,000-4,499	2	40%
3,500-3,999	3	35%
3,000-3,499	4	30%
2,500-2,999	5	25%
2,000-2,499	6	20%
1,500-1,999	7	15%
1,000-1,499		10%
500-999		
0-499	10	0%

## **NH CRS Communities**

<ul> <li>Keene</li> </ul>	Class 8	10%
<ul> <li>Marlborough</li> </ul>	Class 9	5%
<ul> <li>Peterborough</li> </ul>	Class 8	10%
<ul> <li>Winchester</li> </ul>	Class 9	5%

Average NH CRS Points = 835 (Class 9)

## **CRS Activities**

## **4 Categories**

- Public Information Activities
- Mapping & Regulatory Activities
- Flood Damage Reduction Activities
- Flood Preparedness Activities

20 Total Activities

## **CRS Activities**

- Public Information Activities
  - Elevation Certificates (56)
  - Map Information Service (140)
  - Outreach Projects (2)
  - Hazard Disclosure (0)
  - Flood Protection Information (22)
  - Flood Protection Assistance (0)

(#) – NH Avg CRS Points

## **CRS Activities**

- Mapping & Regulatory Activities
  - Additional Flood Data (0)
  - Open Space Preservation\* (179)
  - Higher Regulatory Standards (165)
  - Flood Data Maintenance (59)
  - Stormwater Management (28)

(#) – NH Avg CRS Points

\* Credit is automatically given to NH community's because of the state's shoreland 50-foot buffer requirement. The actual points per community is based on a community impact adjustment.

## **CRS Activities**

- Flood Damage Reduction Activities
  - Floodplain Management Planning (0)
  - Acquisition and Relocation (5)
  - Flood Protection (0)
  - Drainage System Maintenance (156)

(#) - NH Avg CRS Points

## **CRS Activities**

- Flood Preparedness Activities
  - Flood Warning Program (0)
  - Levee Safety (0)
  - Dam Safety (0-45)\*

(#) - NH Avg CRS Points

\* Credit is given to a community that would be affected by a flood from the failure of a high-hazard potential dam

## **CRS Pilot Toolkit**

- Currently developing a toolkit to make available information and data which are eligible for CRS credit points easily accessible.
- Can assist communities interested in joining CRS or existing CRS communities

## **What's Next?**

- Communities Interested in Higher Standards and/or Community Rating System
  - Review materials
  - Contact Jennifer at OEP for further assistance
  - Talk to the other communities that are already enforcing higher regulations and/or participating in CRS

## **Contact Information**

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NH Floodplain Management Coordinator
NH Office of Energy and Planning
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jennifer.gilbert@nh.gov
www.nh.gov/oep/programs/
floodplainmanagement/